

ABSTRACT OF THE DISCLOSURE

A trench capacitor process for preventing parasitic leakage. The process is capable of blocking leakage current from a parasitic transistor adjacent to the trench, and
5 includes the steps of forming a doping layer and a cap layer covering portions of the sidewall of the trench and performing an annealing process on the doping layer to form a dopant region in the substrate adjacent to each sidewall of the trench and blocks leakage current from a parasitic
10 transistor adjacent to the trench.